LEAN MANUFACTURING PRINCIPLES

Lean manufacturing is a production system that seeks to create value for the customer and eliminate wastes for the producer. It was most notably pioneered in Japan by the Toyota Company, and together with the work of American W. Edwards Deming it transformed the post -World War II economy of Japan. Today its principles are widely applied across many sectors and disciplines beyond manufacturing.

THE 5 KEY LEAN MANUFACTURING PRINCIPLES:

1. SPECIFY THE VALUE OF YOUR WORK.

What is the value of your work as perceived by your customer? Identify the value that your customer is paying for or the value that your customer participates in your business because of. This value may be your unique varieties or products, the practices you use to make them, or the quality of your products or services.

2. MAP THE STEPS IN YOUR VALUE CHAIN.

Map out all the steps in your work as you create that value for your customer. This may start at taking inventory before ordering ingredients, purchasing, receiving, mixing/making a product, packing, taking orders, delivering etc. Start by writing or mapping out the process step-by-step.

3. MAKE THE PROCESS FLOW SMOOTHLY.

Look at all the steps in your work process and eliminate waste and friction points. If there are steps that don't create the value as perceived by your customer, take them out of the process for that product.

See flip side for types of waste to think about.

4. ESTABLISH CUSTOMER PULL.

Find ways to create customer 'pull' for your products instead of having to 'push' sales based on your production output. Drive demand instead of needing to find homes for product.

5. PURSUE PERFECTION.

Create a culture of continuous improvement, continue to eliminate wastes, and document and standardize processes. Make quality and improved processes an ongoing commitment.

OTHER FOUNDATIONAL IDEAS FROM LEAN MANUFACTURING:

- 1. Use systems thinking to look for and address ROOT CAUSES of problems.
 - 2. Empower any employee to STOP PRODUCTION FOR QUALITY ISSUES.
 - 3. Respect the HUMANITY and COMPANY CULTURE of your people.

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When work processes are reviewed, *lean manufacturing* assesses the steps in each process to look for efficiencies. It does this by looking for any of the *8 types of waste* that can be eliminated. Remember: the goal is to eliminate anything that doesn't create the value perceived by the customer and to increase your ability to create that value.

THE 8 TYPES OF WASTE:

1. OVERPRODUCTION

Did you plant too much? Did you hire more people than you need for your sales forecast? Are you throwing out excess product after market or wholesale orders? Are you having lots of meetings without action?

2. WAITING

Are workers waiting on direction between tasks? Is there a bottleneck in your packing process? Is decision-making a holdup in your operation?

3. UNNECESSARY TRANSPORT OR CONVEYANCE

Are you moving things around that don't create the value for the customer? How many times are you transporting the product before it gets to the customer?

4. OVERPROCESSING OR INCORRECT PROCESSING

Did products get bunched when you need them loose? Is someone trimming every root hair off every beet?

Are you wasting time and effort by doing too much?

5. EXCESS INVENTORY

Are you carrying more supplies than you need? Did you put up more product than you need?

6. MOTION

Do you spend a lot of time looking for things you need to complete the process? Are you making special trips for frequently used tools? Can you simplify your team's physical movements to find efficiency?

7. DEFECTS

Do you have to spend a lot of time checking over other people's work to make sure it meets your quality needs? Are you reworking or fixing problems with orders?

8. UNUSED SKILLS OR PEOPLE POTENTIAL

Are your people in positions they're trained for? Are there ideas for improvement from your team? Are there skills your team doesn't have that could boost the value of your work?

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